

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A fluorescence microscope having at least one exchangeable filter insert (12) and at least one illumination device (1) having at least one light source (22), wherein the filter insert (12) is coupled by means of a coupling apparatus (19) to the illumination device (1) so that in an operating state no excitation illumination occurs in the fluorescence microscope without said filter insert (12) in a working position, and wherein upon insertion of the filter insert (12), a dimmer for the excitation light source (22) is switchable by insertion or removal of the filter insert (12) by means of the coupling apparatus (19).

Claim 2 (previously presented): The fluorescence microscope as defined in Claim 1, wherein in the operating state, current delivery to the excitation light source (22) is switchable by means of the coupling apparatus (19) by insertion or removal of the filter insert (12).

Claim 3 (canceled)

Claim 4 (previously presented): The fluorescence microscope as defined in Claim 1, wherein upon insertion of the filter insert (12), a shutter (6) for an illumination beam path (2b) is switchable by insertion or removal of the filter insert (12) by means of the coupling apparatus (19).

Claim 5 (previously presented): The fluorescence microscope as defined in Claim 4, wherein in the operating state the shutter (6) is switchable by means of an electric motor (9).

Claim 6 (previously presented): The fluorescence microscope as defined in Claim 5, wherein in the operating state the shutter (6) can be opened and held open by means of the electric motor (9) only when the electrical circuit necessary therefor is closed by the apparatus (19).

Claim 7 (original): The fluorescence microscope as defined in Claim 2, wherein in the event of a power failure at the microscope, current delivery to the excitation light source is automatically switched off.

Claim 8 (currently amended): The fluorescence microscope as defined in Claim [[3]] 1, wherein in the event of a power failure at the microscope, the dimmer for the excitation light source is automatically switched on.

Claim 9 (original): The fluorescence microscope as defined in Claim 4, wherein in the event of a power failure at the microscope, the shutter (6) is automatically closed.

Claim 10 (previously presented): The fluorescence microscope as defined in Claim 4, wherein the shutter (6) is closable by the force [(F)] of a spring (7).

Claim 11 (previously presented): The fluorescence microscope as defined in Claim 4, wherein the shutter (6) is closable by the force of gravity.

Claim 12 (previously presented): The fluorescence microscope as defined in Claim 4, wherein the shutter (6) is closable by means of elastic materials.

Claim 13 (previously presented): The fluorescence microscope as defined in Claim 4, wherein the shutter (6) is closable by magnetic force.

Claim 14 (previously presented): The fluorescence microscope as defined in Claim 4, wherein the shutter (6) is embodied as a rotary slide.

Claim 15 (previously presented): The fluorescence microscope as defined in Claim 4, wherein the shutter (6) is embodied as a linear mechanical stop.

Claim 16 (previously presented): The fluorescence microscope as defined in Claim 1, wherein at least two filter inserts (12) are arranged on a changeable filter carrier, e.g., a filter turret (11).

Claim 17 (previously presented): The fluorescence microscope as defined in Claim 16, wherein different filter inserts (12) can be brought into a working position by manual switching of the changeable filter turret (11).

Claim 18 (previously presented): The fluorescence microscope as defined in Claim 1, wherein the filter insert (12) is constituted from a combination of several individual filters (13, 14).

Claim 19 (previously presented): The fluorescence microscope as defined in Claim 1, wherein the filter insert (12) is embodied with at least one switching cam (19) which actuates a sensitive microswitch (20) with a closing function.

Claim 20 (previously presented): The fluorescence microscope as defined in Claim 1, wherein the filter insert (12) is equipped with at least one permanent magnet which, in the operating state, actuates a magnetic switch with a closing function.

Claim 21 (previously presented): The fluorescence microscope as defined in Claim 1, wherein the filter insert (12) is equipped with at least one electrically conductive contact surface which acts, in the operating state, as a switch (20).

Claim 22 (previously presented): The fluorescence microscope as defined in Claim 18, wherein at least one of the filters (13, 14) is equipped with an electrically conductive coating which acts, in the operating state, as a switch (20).

Claim 23 (previously presented): The fluorescence microscope as defined in Claim 1, wherein the filter insert (12) is embodied with at least one optical signal generator which makes the switch (20) switchable.

Claim 24 (currently amended): The fluorescence microscope as defined in Claim ~~[[4]]~~ 1, wherein the shutter (6) is arranged ~~not in the illumination beam path (2b) but~~ in an observation beam path (15).

Claim 25 (previously presented): The fluorescence microscope as defined in Claim 1, wherein said fluorescence microscope is a stereomicroscope.

Claim 26 (currently amended): ~~[[A]]~~ The fluorescence microscope as defined in Claim 2, wherein said coupling apparatus (19) is a mechanical apparatus.

Claim 27 (currently amended): ~~[[A]]~~ The fluorescence microscope as defined in Claim 2, where said coupling apparatus (19) is an electrical apparatus.

Claim 28 (currently amended): ~~[[A]]~~ The fluorescence microscope as defined in Claim 2, wherein said coupling apparatus (19) is an optical apparatus.

Claim 29 (currently amended): [[A]] The fluorescence microscope as defined in Claim 2, wherein said coupling apparatus (19) is a magnetic apparatus.

Claim 30 (previously presented): The fluorescence microscope as defined in Claim 2, wherein upon insertion of the filter insert (12), a dimmer for the excitation light source (22) is switchable by insertion or removal of the filter insert (12) by means of the coupling apparatus (19).

Claim 31 (previously presented): The fluorescence microscope as defined in Claim 2, wherein upon insertion of the filter insert (12), a shutter (6) for the illumination beam path (2b) is switchable by insertion or removal of the filter insert (12) by means of the coupling apparatus (19).

Claim 32 (previously presented): The fluorescence microscope as defined in Claim 4, wherein in the operating state the shutter (6) is switchable by means of an electromagnet.

Claim 33 (canceled)

Claim 34 (previously presented): The fluorescence microscope as defined in Claim 32, wherein in the operating state the shutter (6) can be opened and held open by means of the electromagnet only when the electrical circuit necessary therefor is closed by the apparatus (19).

Claim 35 (previously presented): The fluorescence microscope as defined in Claim 9, wherein the shutter (6) is closable by the spring (7).

Claim 36 (previously presented): The fluorescence microscope as defined in Claim 9, wherein the shutter (6) is closable by force of gravity.

Claim 37 (previously presented): The fluorescence microscope as defined in Claim 9, wherein the shutter (6) is closable by means of elastic materials.

Claim 38 (previously presented): The fluorescence microscope as defined in Claim 9, wherein the shutter (6) is closable by magnetic force.

Claim 39 (previously presented): The fluorescence microscope as defined in Claim 4, wherein the shutter (6) is embodied as a rotary mechanical stop.

Claim 40 (previously presented): The fluorescence microscope as defined in Claim 16, wherein at least two filter inserts (12) can be brought into the working position by motorized switching of the changeable filter turret (11).